UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,084	05/23/2002	Rolf Steiner	20 99 0025	9104

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EXAMINER
ETTEHADIEH, ASLAN

ART UNIT	PAPER NUMBER
2637	

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/069,084	STEINER, ROLF
	Examiner	Art Unit	
	Aslan Ettehadieh	2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05/23/2002</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 15* is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>05/23/2002</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☐ All b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1.   The drawings are objected to under 37 CFR 1.83(a) because they fail to show *elements 210A, 210B, and 260 in the drawings* as described in the specification (page 9 line 18 – page 10 line 5 and fig 3). Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims 1, 2, 3, 4, 5, 6, 7 are rejected under 35 U.S.C. 102(b) as being anticipated

by Boze (US 5416847).

3.   Regarding Claim 1, Boze discloses a method for correcting a measured signal

transmitted through a system (col 1 lines 11 – 13 and col 3 lines 44 – 48, where the

reduction of noise is being interpreted as correcting a signal), the method comprising:

sampling the measured signal to a sampled signal sequence, providing a signal series

as a plurality of the sampled signal sequences put together successively (col 4 lines 53

– 60), windowing the signal series with a window function (col 13 line 62 – col 14 line 2),

and recalculating a corrected measured signal from the windowed signal series using

information about the frequency-dependency of the system (col 13 line 58 – col 2 line

18).

4.   Regarding Claim 2, Boze discloses all limitations of claim 2 as analyzed in claim

1 above. Boze further disclose wherein recalculating a corrected measured signal from

the windowed signal further comprises: transforming the windowed signal series from

time domain into frequency domain (figure 4 elements 75 and 87 and col 1 line 58 – col

2 line 18), modifying the transformed signal series with a transfer function as a function

of frequency of the system (col 1 lines 20 – 38 and col 1 line 58 – col 2 line 18),

preferably by multiplying the transformed signal series (figure 4 element 81) with the

inverse transfer function (figure 4 element 89) of the system (col 14 lines 21 – 30), re-

transforming the modified transformed signal series back from the frequency domain

into the time domain (figure 4 element 89), and receiving the corrected measured signal

from the re-transformed signal series (figure 4 elements 89 and 73).

5.   Regarding Claim 3, Boze discloses all limitations of claim 3 as analyzed in claim

1 above. Boze further disclose wherein recalculating a corrected measured signal from

the windowed signal (figure 4 elements 75 and 87) further comprises modifying the

corrected measured signal with a function inverse to the window function (figure 4

elements 89 and 73).

6.   Regarding Claim 4, Boze discloses all limitations of claim 4 as analyzed in claim

2 above. Boze further disclose wherein receiving the corrected measured signal from

the re-transformed signal series further comprises selecting a corrected signal

sequence substantially corresponding to the sampled signal sequence (col 3 line 50 –

col 4 line 2, col 13 line 53 – col 4 line 2, and col 8 lines 31 – 33).

7.   Regarding Claim 5, Boze discloses all limitations of claim 5 as analyzed in claim

4 above. Boze further disclose wherein the selected corrected signal sequence is

selected substantially from a middle range of the re-transformed signal series (col 1 line

65 – col 2 line 2 and col 13 lines 62 – 68).

8.   Regarding Claim 6, Boze discloses all limitations of claim 6 as analyzed in claim

1 above. Boze further disclose wherein sampling the measured signal is executed by a

measuring device (Figure 4 element 15) at the highest accuracy provided by said

measuring device (one skilled in the art at the time in the invention would analyze the

a/d converter of Boze would convert an analog signal to a digital signal by measuring

the signal with the highest accuracy).

9.   Regarding claim 7, Boze discloses a method for correcting a measured signal

transmitted through a system (col 1 lines 11 – 13 and col 3 lines 44 – 48, where the

reduction of noise is being interpreted as correcting a signal) having a transfer function

as a function of frequency (col 1 lines 33 – 38), the method comprising: sampling the

measured signal to a sampled signal sequence, providing a signal series as a plurality

of the sampled signal sequences put together successively (col 4 lines 53 – 60),

windowing the signal series with a window function (col 13 line 62 – col 14 line 2),

transforming the windowed signal series from time domain into frequency domain

(figure 4 elements 75 and 87 and col 1 line 58 – col 2 line 18), modifying the

transformed signal series with the transfer function of the system (col 1 lines 20 – 38

and col 1 line 58 – col 2 line 18), preferably by multiplying the transformed signal series

(figure 4 element 81) with the inverse transfer function (figure 4 element 89) of the

system (col 14 lines 21 – 30), re-transforming the modified transformed signal series

back from the frequency domain into the time domain (figure 4 element 89), and

receiving a corrected measured signal from the re-transformed signal series (figure 4

elements 89 and 73).

10.   Regarding claim 8, Boze disclose a method for providing a measured signal

(output of element 15 of figure 4) for further processing, the method comprising:

sampling the measured signal to a sampled signal sequence, and providing a signal

series as a plurality of the sampled signal sequences put together successively (col 4 lines 53 – 60).

11. Regarding claim 9, the method claimed as a software is nothing more than restating the function of the specific components of the method as claimed above and therefore, it would have been obvious, considering the aforementioned rejection for the method claim 1.

12. Regarding claim 10, the steps claimed as apparatus is nothing more than restating the function of the specific components of the method as claims above and therefore, it would have been obvious, considering the aforementioned rejection for the method claim 1.

13. Regarding claim 11, the steps claimed as apparatus is nothing more than restating the function of the specific components of the method as claims above and therefore, it would have been obvious, considering the aforementioned rejection for the method claim 1.

14. Regarding Claim 12, Boze discloses all limitations of claim 12 as analyzed in claim 1 above. Boze further disclose wherein said measured signal is a high speed (col 6 lines 60 – 61) digital pulse (col 2 lines 11 – 12).

15. Regarding Claim 13, Boze discloses all limitations of claim 13 as analyzed in claim 7 above. Boze further disclose wherein said measured signal is a high speed (col 6 lines 60 – 61) digital pulse (col 2 lines 11 – 12).

16.   Regarding Claim 14, Boze discloses all limitations of claim 14 as analyzed in

claim 8 above. Boze further disclose wherein said measured signal is a high speed (col

6 lines 60 – 61) digital pulse (col 2 lines 11 – 12).

17.   Regarding Claim 15, Boze discloses all limitations of claim 15 as analyzed in

claim 11 above. Boze further disclose wherein said measured signal is a high speed

(col 6 lines 60 – 61) digital pulse (col 2 lines 11 – 12).

Other prior art cited

18.   The prior art made of record and not relies upon is considered pertinent to

applicant's disclosure.

19.   Chu (US 5715319) discloses a system which digital inputs are fed to a window

then to a fft then to an ifft then to window then outputted.

20.   Kitayoshi (US 5519402) discloses a system that includes the following

components: adc, window, fft and ifft.

21.   Belotserkovsky (US 6628735) discloses a system receives and analog signal and

then samples it, then applies windowing to it, then does an fft and outputs a correctly

sampled signal.

Contact information

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Aslan Ettehadieh whose telephone number is (571) 272-

8729. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Aslan Ettehadieh
Examiner
Art Unit 2637

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JAY K. PATEL
SUPERVISORY PATENT EXAMINER